

CLAIM AMENDMENTS

1 1. (currently amended) A method for performing an input/output (I/O)
2 operation in a computer between an I/O-initiating subsystem and a device through a
3 hardware memory, in which:
4 the memory is arranged into portions that are separately addressable
5 using first identifiers that are represented using a first number of address bits;
6 for the I/O operation, the device accesses a first space of the memory
7 using a second number of address bits;
8 the subsystem addresses I/O requests to a second space of the memory
9 using second identifiers that are represented using a second number of bits;
10 the method comprising the following steps:
11 initially mapping the second identifiers to respective first identifiers that
12 identify portions of the memory in the second memory space; and
13 for any I/O request that meets a remapping criterion, remapping the
14 corresponding second identifier to one of the first identifiers that identifies a portion of
15 the memory in the first space of the memory;
16 in which the second space is different from the first space and the second
17 number of address bits is greater less than the first number of address bits.

1 2. (original) A method as in claim 1, further comprising generating each first
2 identifier to have a subset of bits identical to corresponding bits of the second identifier
3 during remapping.

1 3. (currently amended) A method as in claim 1, further comprising, for any I/O
2 request that fails to meet the remapping criterion, creating a new copy of the data set in
3 the a buffer upon each instance of the I/O request.

1 4. (original) A method as in claim 1, further comprising, for each second
2 identifier that is currently mapped into the first space of the memory and that meets a
3 remapping condition, again mapping the second identifier into the second space of the
4 memory.

1 5. (original) A method as in claim 4, further comprising the step of freeing for
2 reallocation the portion of the memory in the first space to which the second identifier
3 had previously been remapped.

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